

IN THE CLAIMS:

Please amend claims 1 and 5 and add new claims 9 and 10, as follows.

1. (Currently Amended) A joint structure to be connected to an assembly and a link of a robot, the joint structure comprising:

a first motor configured to cause the assembly to swing in a longitudinal motion with respect to the link; and

a second motor configured to cause the assembly to swing in a lateral motion with respect to the link, wherein

the first motor and the second motor are disposed so that the rotation output shaft of the first motor and the rotation output shaft of the second motor are parallel with each other and are orthogonal to the link.

2. (Previously Presented) A joint structure of a robot according to claim 1 further comprising:

a third motor configured to cause a rotary motion of the assembly with respect to the link, wherein

the output shaft of the third motor is shifted by a predetermined amount with respect to a central axis of the rotary motion.

3. (Previously Presented) A joint structure of a robot according to claim 1, further comprising:

a movable cover configured to be rotatable with respect to at least one of the assembly and the link, and

an elastic member configured to generate a force between the movable cover and at least one of the assembly and the link, and place the movable cover at a predetermined position.

4. (Previously Presented) A joint structure of a robot according to claim 1, further comprising:

a first rotary unit is connected to the assembly;

a second rotary unit configured to support the first rotary unit while allowing the rotation around a first axis of the first rotary unit; and

a base configured to support the second rotary unit while allowing the rotation around a second axis orthogonal to a first axis of the second rotary unit, wherein

the first motor and the second motor are disposed on the base.

5. (Currently Amended) A joint structure to be connected to an assembly and a link of a robot, the joint structure comprising:

a first motor configured to cause the assembly to swing in a longitudinal motion with respect to the link;

a second motor configured to cause the assembly to swing in a lateral motion with respect to the link, wherein the first motor and the second motor are disposed so that the output shaft of the first motor and the output shaft of the second motor are parallel with each other and are orthogonal to the link~~A joint structure of a robot according to claim 4 further comprising;~~

a first rotary unit is connected to the assembly;

a second rotary unit configured to support the first rotary unit while allowing the rotation around a first axis of the first rotary unit;

a base configured to support the second rotary unit while allowing the rotation around a second axis orthogonal to a first axis of the second rotary unit, wherein the first motor and the second motor are disposed on the base;

a first swing lever is connected to an output shaft of the first motor, and configured to change the rotation of the output shaft of the first motor into a reciprocating motion;

a joint is connected to the first swing lever and the first rotary unit, and configured to transfer the reciprocating motion to the first swing lever to rotate the first rotary unit around the first axis;

a second swing lever is connected to an output shaft of the second motor, and configured to change a rotary motion of the output shaft of the second motor into a reciprocating motion; and

a rod which is connected to the second swing lever and the second rotary unit, and configured to transfer the reciprocating motion to the second rotary unit to rotate the second rotary unit around the second axis.

6. (Previously Presented) A joint structure of a robot according to claim 4 further comprising:

a motor side pulley is connected to an output shaft of the third motor;

a driven pulley is connected to the base and configured rotate the base around the central axis of the rotary motion; and

a belt configured to transfer the rotation of the motor side pulley to the driven pulley.

7. (Previously Presented) A joint structure of a robot according to claim 5 further comprising:

a motor side pulley is connected to an output shaft of the third motor;

a driven pulley is connected to the base and configured to rotate the base around the central axis of the rotary motion; and

a belt configured to transfer the rotation of the motor side pulley to the driven pulley.

8. (Original) A joint structure of a robot according to claim 3, wherein

a contact face to which the elastic member is contactable is formed on the movable cover, and

a stopper, which contacts with the elastic member to control the range of the rotation around the central axis of the rotary motion of the movable cover, is provided at an inside periphery of the movable cover.

9. (New) The joint structure according to claim 1, wherein the first motor and the second motor are disposed side by side on one and other sides of the central axis of the link, respectively.

10. (New) A joint structure to be connected to an assembly and a link of a robot, the joint structure comprising:

a first motor configured to cause the assembly to swing in a longitudinal motion with respect to the link; and

a second motor configured to cause the assembly to swing in a lateral motion with respect to the link, wherein

the first motor and the second motor are disposed side by side on both sides of the central axis of the link, respectively, so that the rotation output shaft of the first motor and the rotation output shaft of the second motor are parallel with each other and are orthogonal to the link.